10:15 am to 11:10 am

Room AR156
Title: A Gentle Introduction to the Cloud Workshop (10:15 am to 12:15 pm)
Peter DePasquale, The College of New Jersey
Abstract: Cloud computing is among the newest buzzwords in technology today, and holds great promise for how products and services are offered to the world via the Internet. This workshop will provide a gentle introduction to the terminology associated with cloud computing, as well as provide a hands-on experience with several of Amazon.com's offerings in the cloud space. We'll also discuss other cloud computing vendors and their offerings. Learn how you can start to leverage the cloud for your personal computing as well as for corporate/professional computing needs. Attendees will utilize TCNJ lab facilities and need a working knowledge of UNIX, SSH, and Java. Laptops are welcome in the lab, and if you are more comfortable working on your machine, please bring it along! This is a hands-on workshop.
Bio: Peter DePasquale is an Associate Professor of Computer Science at The College of New Jersey. He holds a Ph.D. and Masters in Computer Science from Virginia Tech and a Masters and Bachelors in Computer Science from Villanova University. His areas of research interest include computer science education and web application development. Peter's work often explores the practical application of computer science principals in the creation of tools to assist in the introductory programming sequence. He is the author of two programming language reference guides and co-author of two introductory programming textbooks.

Room AR124,
Automated Functional Testing
Rajaram Ganeshan and Premanand Chandrasekaran, Thoughtworks, Inc.
Abstract: Software teams mostly find themselves working with three broad categories of tests - unit, integration and functional (excluding technology verification test categories like performance, load, stress etc.). Unit tests indicate whether the code is doing things right. Functional tests are complementary to - but quite different from unit tests. Functional tests tell whether the completed application is working correctly and providing the proper functionality. Simply put, unit tests are written from the code developer's perspective, while functional tests are written from the end user's perspective. When they work reliably, functional tests give users, stakeholders and developers confidence that the software meets agreed upon requirements. This talk examines recipes on how to create and maintain a smoothly running suite of functional/acceptance tests that can be reliably used to verify that the software is ready.
Bio: Rajaram Ganeshan and Premanand Chandrasekaran both work for Thoughtworks, Inc. (http://www.thoughtworks.com/) where they build custom applications for clients using Agile methodologies.

Room AR144
Getting Started with Microcomputers, the Internet, and Digital Photography
Herman Hinitz, H. Hinitz Photography

Abstract: This session is designed for the beginner, who would like to use a personal microcomputer for word processing, electronic spreadsheets, graphics, Internet (browsers), databases, antivirus programs, firewall programs, digital photography, etc., but are unsure how or where to begin. Appropriate examples will be used with MS Office Suite, WordPerfect Office Suite, etc. There will also be a poster display with related information and examples.
Bio: Herman Hinitz has used diversified software and hardware in research, consulting, publications, and digital photography. Some of his work has been included in commercially available books, professional publications, fine art collections, and gift shops. He is a long time supporter of the Trenton Computer Festival.

Room AR148
Introducing iPad 2 - The Perfect Learning Companion
Dave Marra, Apple, Inc.
Abstract: See how iPad 2 is changing the learning landscape, providing students with instant access to thousands of educational apps in all grade levels and all subject areas. Designed to be thin and light enough to take anywhere, iPad 2 is the best way to experience the web, email, photos, video and books. With a large, high-resolution display, an incredibly responsive Multi-Touch screen and an amazingly powerful Apple-designed chip, iPad 2 isn't just the best device of its kind, it's a whole new kind of device. Discover iPad 2 today!
Bio: As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility and Mac/PC integration. For more information about Dave, please visit his web site at www.marrathon.com.

Room AR128
Color Spaces, Human Vision, and Computers
Charles Lamb, Retired
Abstract: Attendees will learn what a color space is and about the color spaces commonly used in computer graphics work. Historical reasons for use of certain color spaces with computers will be presented. The problem of why commonly used color spaces make it difficult to accurately process and display images will be discussed.
Bio: Charles Lamb has had a wide variety of experiences developing computer graphics systems for both government and industry. He has worked on projects for film and video production and distribution, simulation, and documentation. His study of color spaces was prompted by problems encountered converting imagery from motion picture film to computer displays and back again.

Room AR114
Title: Online Education: Transitioning a traditional lab-based course to an online environment
Kevin Pintong, Binghamton University

Abstract: Online education is a continually growing field. However, absent from online pedagogical methods are lab-based courses. This is due to the extended requirements of a laboratory component of a course, as well as many challenges that an engineering/science course would encounter in the online environment. In this discussion, we will talk about how our model for online education was created, various problems we faced, and strategies for instructors looking to create online courses. Our research focuses on placing Circuits and Digital Logic courses online, but the concepts can be generalized to other laboratory based courses.
Bio: Kevin Pintong is a Masters student at Binghamton University with interests in education and embedded systems design.

Room AR154
GPS Secrets
Cass Lewart, Freelance writer
Abstract: There is more to a GPS than a pleasant voice telling you to turn right on Cedar Street, and showing a color display of adjacent ramps and intersections. In my presentation I will talk about the technical implementation of the current GPS systems, how the user location is derived from precise atomic clocks on satellites and a non-precise clock in your GPS receiver, how to capture and send data to your GPS, and how to modify its built-in vocabulary. I will also discuss privacy issues, secret keys, use of a GPS for hiking, Geocaching, and much more.
Bio: Cass Lewart is an electrical engineer, a long time hobbyist, author of several books on computer programming, modems and programmable calculators. He has also written many project articles in popular electronics magazines. Cass and Ruth are joint recipients of the 2005 Hobbyist of the Year award from the Amateur Computer Group of New Jersey. Cass and Ruth are members of ACGNJ nearly since its formation. Cass is a graduate of the Swiss Federal Institute of Technology and worked at Bell Labs and Unisys.

Room AR137
Lexical Macros in C/C++
Robert Gezelter, Software Consultant
Abstract: The C pre-processor is a powerful tool for producing well documented, maintainable, high-performance code. However, many who program in C/C++ avoid using the C pre-processor lexical macro facility. There are many varied reasons for this reluctance, but they are all easily addressable. Wrapped within standard header files (e.g., stdlib.h) the use of macros is ubiquitous; yet many unnecessarily shy away from writing their own macros. This need not be the case. Simple rules make macro writing straightforward and safe. This session will examine precisely what the pre-processor does, using specific examples and examples, from standard C header files. In the process, we will show why judicious use of the C pre-processor, and lexical macros in general, done properly, is a powerful and safe tool for use in developing code.
Bio: Robert Gezelter is a Senior Member of IEEE and an alumnus of the IEEE Computer Society's Distinguished Visitors Program. He holds BA and MS degrees in Computer Science from New York University, and is a Contributing Editor of the Computer Security Handbook, 5th Edition. He has spoken and written extensively on operating

systems, networks, performance, security, tools, and similar areas. Robert Gezelter is in private practice and maintains his offices in Flushing, New York. He can be contacted via his firm's www site at http://www.rlgsc.com

Room AR106
Arduino Workshop (all day)
Rick Anderson, Bill French, Brian Boccardi, and Phil Gillhaus and, FUBAR Labs
Abstract: A day long Arduino tutorial and users meeting. We will start out with an intro to Arduino, followed by a beginners Arduino hands-on class. We will then have an open *hack* period, and will finally have a developers' round table. Arduino is an Open Hardware project used by artists and engineers around the world.
Bio: Rick Anderson is President of Fair Use Building and Research (FUBAR) Labs, a *hackerspace* in Highland Park, NJ. He has worked to provide programs on soldering, basic electronics, Arduino and 3D printing to the New Jersey community. Arduino is an Open Hardware project used by artists and engineers around the world. He is also part of the official Arduino testing team. In 2011, he participated in the Global Game Jam and created the first third party game for the Microtouch Open Hardware Game Platform, Heat Death, http://globalgamejam.org/2011/heat-death-microtouch.
Bill French is the Vice President for FUBAR Labs. Besides hacking, Bill's interests include silk screening, electronics, Arduino, Netduino, CNC Controls, and circuit board creation. He has an A.S. in Computer Science and is the Director of Telecommunications, Network, and Support Services for the Princeton Theological Seminary.
Brian Boccardi has presented at TCF for many years. He is a member and trustee of FUBAR Labs, and holds the amateur radio callsign N2MPM. He works with the NJ state office of emergency management. He also teaches electronics, Arduino and soldering.
Phil Gillhaus is the Treasurer at FUBAR Labs, where he spends his time teaching classes and tinkering with electronics, micro-controllers, lasers, machine tools, and toy guns. Phil has provided instructional support for programs in computer literacy, web design, and course management software at Brookdale Community College and Rutgers University, and is currently working in the K-12 division of MAXIMUS.

11:20 am to 12:15 pm

Room AR156
Cloud Workshop Continued

Room AR124,
Supercomputing on your Desktop Via CUDA
Alan Andrea, AT Andrea Technologies
Abstract: This talk will focus on developing applications for the Nvidia CUDA framework using the Microsoft Visual Studio Development Environment to produce practical applications to solve everyday problems. Particularly, in leveraging the extensive GPU threading environment to outsource EXCEL tasks to quickly solve problems that would otherwise take forever in a CPU environment.

Bio: Alan Andrea is a programmer at a major financial services company in NYC. He has over 18 years of programming experience.

Room AR144
No Snoring Allowed: Creating Better Electronic Presentations
Mark Streitman, Evolutionary Thought, LLC
Abstract: Powerpoint is one of the best and worst software inventions of the computer age. First created in 1987, it has become THE presentation tool, on Earth. But people have probably taken more unplanned naps during Powerpoint presentations than from anything else. The epidemic of bad presentations has also spawned the term "Death by Powerpoint". But, Powerpoint can actually be used to enhance speeches and create great presentations. In this workshop, learn why most presentations are dull, what are the common mistakes and how you can create exciting, fun and informative presentations that will wow your audience.
Bio: Mark Streitman is a software engineer and a professional speaker. He designs and programs Linux system, microcontroller based boards, does R&D and created the world's first Portable Foucault Pendulum. He has built several Home Theater PCs and loves to tinker around with Ubuntu Linux systems. He has also achieved an advanced level in the Toastmasters, is President of the New Jersey Society for Amateur Scientists and is an excellent cook and chess player.

Room AR148
Apple and Accessibility - Making Technology Available to All Learners
Dave Marra, Apple, Inc.
Abstract: Discover new ways Apple is making exciting technology available to all learners as part of its ongoing commitment to accessibility. For over 20 years, the Mac has shipped with dozens of accessibility features built in, at no additional cost, allowing it to be used right out of the box by people with disabilities. Now, with the innovative new iPod and iPad, Apple continues to set the standard by taking accessibility and learning to a whole new level.
Bio: As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility and Mac/PC integration. For more information about Dave, please visit his web site at www.marrathon.com.

Room AR128
Minsky on Music
Teresa Nakra, The College of New Jersey
Abstract: AI pioneer Marvin Minsky, co-founder of the MIT Artificial Intelligence Lab and Turing award winner, is not a professional musician. However, music is a passion that he has engaged in daily since childhood. Friends and colleagues know him as a thoughtful musical philosopher and pianist who likes to improvise fugues in Baroque style. To Minsky, contrapuntal musical structures provide abstract symbolic frameworks

that allow him to process multiple simultaneous perspectives. He proposes that this way of thinking about problems enables a better likelihood of finding innovative solutions. In this talk, Teresa Nakra will describe key ideas from Minsky's landmark 1981 paper, "Music, Mind, and Meaning." She will present his contributions in AI/Robotics/Math/Music in an accessible way that contextualizes the work's impact and scope.

Bio: Teresa Nakra, Associate Professor of Music at TCNJ, is an expert in Music Technology, HCI, Music Perception, and Affective Computing. Her interactive conducting experiences have been showcased in museums, music festivals, and concert halls. Her work was profiled in the New Yorker Magazine, the New York Times, CNN Headline News, BBC World Service, and the Associated Press. Teresa founded and runs Immersion Music Inc. She earned a B.A. at Harvard and a PhD. from MIT.

Room AR114

Latest, Updated Guide to the Absolutely Best Websites and Search Engines

Eva Kaplan, Computers + Kids Camp/Pennington Computer School

Abstract: The 2012 presentation will include a new focus: sites that encourage and reward visionary thinking; interactive sites that heighten brain power - or stimulate creativity by designing for the future; game design sites; puzzle places that engage us to determine the "why" behind everyday things; and even online strategy games and social game maker sites. This year, our annual guru for cyberspace will also speak about worthwhile "subscription sites" and new types of networking sites. This is a wham bam new look at what's out there on The Internet!

Bio: A speaker since TCF's inception in 1976, Eva Kaplan's Computers + Kids Summer Camp continues to receive accolades endorsements from NASA and LOGO Software. Started in 1982, it offers exciting and enriching computer, engineering, and technology experiences to Princeton area youth. Eva initiated numerous computer courses for adults and children at MCCC. She's listed in Who's Who in Science and Engineering and in Who's Who in U.S. Executives. Eva has been a long time judge for the Elementary Division of The Mercer Science and Engineering Fair and has mentored student projects for Future City Philadelphia in conjunction with Engineers Week. See evalkaplan@cs.com for additional information.

Room AR154

Creating the Universe in your Home

Aram Friedman, Ansible Technologies Ltd.

Abstract: Aram Friedman will demonstrate how he created a software based planetarium and then illustrate it features.

Bio: Aram Friedman was Director of Engineering of the Hayden Planetarium from 1998 through 2002. He has been involved with film, video, computer graphics, and special effects industries.

Room AR137

Web Site Accessibility Workshop (11:20 am to 1:20 pm)

Mike Barlow, DBITPro

Abstract: Approximately 19% of Americans have at least one or more disability, including visual, hearing, physical, mental and others, which prevent them from achieving the full benefit of the Internet, and many Web sites in particular.
Even before signing into law, the Section 508 Amendment of the Rehabilitation Act of 1973, (which requires that Federal organizations to abide by specific accessibility guidelines for electronic and information technology,) there has been a determined effort for many other organizations to implement their Web Sites in a fashion, which is more accessible to individuals with disabilities. This workshop will show examples of how to develop web sites, which provide ease of use for individuals with disabilities. It will also go over methods of testing compliance to accessibility standards.
Bio: Mike Barlow has been involved in the computer industry since practically the start of personal computing and has spoken at many conferences over the years. Most recently Mike has concentrated on web-based applications (particularly Web 2.0), including the use of AJAX and JSON as well as Application Integration combining the power of Lotus Domino, Microsoft SharePoint, mySQL, PHP and .Net. Mike is also a big proponent of Website Accessibility and good design practices based on standards.

Room AR106
Arduino Workshop Continued – Hands on with Arduino

12:25 pm to 1:20 pm

Room AR156
Internet Job$$$
Donald Hsu, Dominican College
Abstract: Groupon, Linkedin, Motorola Mobility, Zynga are hot. The stock market is up. Yes, the economy is back. Retires are going back to work! Eighty percent of these people, have jobs from the Internet. Accounting needs 2.1 million by 2019 (Sarbanes Oxley, forensics, QuickBooks, PeachTree, MS Dynamics); application developers (C++, Java, C#) - thousands of jobs, but no applicants; database (MySql, MS Sql server, Oracle 11g, SAP, Sybase, Data Warehouse), starting at $85,000; networking (Cisco, Info Security, A+, Network+, CIEE, CISSP); systems (Unix, Linux, Window 7/8); business intelligence (Project Manager, Global Finance, sales/marketing of tech product/service). Computer majors are down 50 to 80% in US universities. This means more jobs for you and me. Bring a resume and get a free critique from the speaker.

Bio: Donald Hsu is a professor at Dominican College and President of the Chinese American Scholars Association (CASA). He has taught 70 subjects from Accounting to Unix. He worked/taught at 35 firms with 9,600+ clients. Clients are working 7000+ companies, including AT&T, Bank America, Goldman Sachs, IBM, JP Morgan Chase, Mercedes Benz, Microsoft, Morgan Stanley, Sony, Toyota, Verizon, etc. Since 2006, CASA has organized and ran 11 successful E-Leader conferences in Asia and Europe, http://www.g-casa.com. Don's complete profile can be found http://www.linkedin.com/pub/donald-hsu/0/15/AR1564.

Room AR124
Product Development Methodologies for Success
Jerry Bellott, GT Digital

Abstract: Engineers can increase their ability to innovate, plan, and develop new products that succeed in the marketplace by increasing their knowledge of the corporate and market environments that they work in. Product development methodologies enable engineers to successfully achieve their goals through appropriate planning of all phases of a project. Product Development Methodologies for Success! will empower you to: 1) Position yourself to be innovative by planning continuing education on current technologies, standards, and practices to fuel creative thinking; 2) Position your company for success by using your creative potential to plan new products that address customer needs well; 3) Improve product quality by addressing customer needs and expectations; 4) Succeed at producing quality products on time by following a structured methodology to break the execution phase down into steps; and 5) Increase peer interaction to have fun and learn from others through formal and informal peer discussion and review. In addition to learning structured methodology concepts, creative engineering professionals will gain perspectives on how businesses decide what design projects to develop and assign to engineering staff.

Bio: Jerry Bellott is an electrical engineer with more than 26 years of experience designing products for the computer, wireless, and telecommunication industries. At Bell Labs, he designed and developed X.25 network interfaces, PBX components, PC products, and 2G cellular IC evaluation circuits. He also contributed to 3G SOC product architectures, and won awards for outstanding product development. A few years ago, Mr. Bellott was a senior systems engineer at ViaGate Technologies, where he co-developed an ATM switch with SONET fiber and VDSL interfaces. It was the first Fiber-to-the-Basement VDSL solution. More recently, he co-designed a DSP circuit board using a MathStar IC. MathStar DSP's contain 64 multiply/accumulate circuits that run at 1 gigahertz each. Mr. Bellott has since designed system test plans, EMI/EMC test plans, and written project documentation for data acquisition, DSP analysis, and radio transmitters and receiver products. He currently delivers seminars among his other duties at GT Digital, which he founded in 2009. Mr. Bellott has an MSEE from Georgia Tech (1980) and a BSEE from WVU (1979). At Georgia Tech, he was a research assistant on a re-configurable DSP computing array project. He served as Vice Chair of the Princeton Chapter of the IEEE Signal Processing Society from 2008 to 2011.

Room AR144
Lego Mindstorms Robotics
Douglas Ferguson, ACGNJ

Abstract: LEGO Mindstorms is a robotics platform based on the well known LEGO building sets. Doug will present an introduction to using the set and a demonstration of LEGO Mindstorms using the included software and Microsoft's Robotics Studio.

Bio: Doug Ferguson is a computer hobbyist who loves learning about new technologies. Having taught himself to program in high school, he continues to explore numerous areas of computers including video editing, web design, visualization, and robotics. In the real world Doug is employed by EMC where he is a Sr. Support Engineer for the Ionix IT operations software product.

Room AR148
Introducing OS X Lion!
Dave Marra, Apple, Inc.
Abstract: The world's most advanced desktop operating system advances even further. Packed with over 250 new features, OS X Lion includes new Multi-Touch gestures; system-wide support for full screen apps; Mission Control, an innovative view of everything running on your Mac; the Mac App Store, the best place to find and explore great software; Launchpad, a new home for all your apps; a completely redesigned Mail app and much more! Discover OS X Lion today!
Bio: As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility and Mac/PC integration. For more information about Dave, please visit his web site at www.marrathon.com.

Room AR128
Video to DVD
David Ciotti, The College of New Jersey
Abstract: For many of us the decay of our video tapes and film is a time boom. To avoid the loss of these family memories, David Ciotti will review the various technologies for converting video to DVD including converting 8 mm and Super 8 mm film to DVD using a TeleCine converter.
Bio: David Ciotti manages the electronics laboratory and provides electronics support for the School of Engineering at The College of New Jersey. He has been the Macintosh Technical support for Mercer County Community College and has taught Troubleshooting and Maintaining your Macintosh for CompuMaster.

Room AR114
Patents, Trademarks and Copyrights, Oh my!
Anthony Carlis, Office of Anthony W. Carlis
Abstract: This talk will be a basic overview of the differences between Patents, Trademarks, Copyrights and other forms of intellectual property. The current trends in intellectual property will be covered as well as any recent Supreme Court cases which may have an influence on current practices.
Bio: Anthony Carlis is a registered patent attorney at the United States Patent & Trademark Office. He has a degree in computer science and a masters degree in electrical engineering. He worked at Baker & Hostetler in Washington D.C. until March of 2011 when he started up his own practice.

Room AR154,
Controlling the World with PIC Microcontrollers
Paul Bergsman, Author and Independent Consultant

Abstract: Microchip's embedded controllers are powerful, inexpensive, and very easy to work with. Paul Bergsman has been designing circuits with PICs for many years. Microchip provides great support to all levels of PIC users, including a large selection of application notes. They also provide a powerful software environment to write and compile your programs. ALL FREE FROM MICROCHIP! Paul will explain why PICs are so popular, operate some of the more popular evaluation boards, (No, the evaluation boards are not free. But, they are very reasonably priced.) In fact, the only thing you need to buy to get started is a PIC programmer, which still lists for less than $50.

Bio: Paul Bergsman, now retired, taught Industrial Arts Technology in the Philadelphia public schools for twenty seven years. Along the way, he obtained a U.S. patent for a unique electro/mechanical lock cylinder, authored a book, ("Controlling The World With Your PC" about interfacing motors, lights, and sensors to a computer's parallel printer port), shared a wonderful 38 year marriage with his wife, Elaine… And, Paul still finds reasons to maintain a computer, which never crashes, and operates from DOS!

Room AR137
Web Site Accessibility Workshop Continued

Room AR106
Arduino Workshop Continued – Hands-on with Arduino

1:30 pm to 2:25 pm

Room AR156
Coming Soon Windows 8
David Soll, Omicron Consulting

Abstract: Microsoft is poised to release a new operating system later this week. Currently dubbed Windows 8, it sports a new user interface called the "Metro" user interface. As a part of this release, there are new tools and guidelines for building applications to conform to the Metro interface. David will provide a demonstration of a beta release of Windows 8 and a discussion of what to expect in the new version of Windows.

Bio: David Soll is the Chief Technology Officer (CTO) of Omicron Development, LLC. and is responsible for the overall technical direction and technology solution set provided by Omicron. Mr. Soll received a BS in Electrical Engineering from Drexel University and has been working in Information Technology for over 30 years. David is currently the Vice Chair of the Central New Jersey chapter of the IEEE Computer Society, Secretary of the Princeton/Central Jersey Section of the IEEE, and is a senior member of the IEEE. He is also the past Chairman and current board member of the New Jersey chapter of the ACM and a senior member of the ACM. In 2004, David received the prestigious Region 1 award from the IEEE. He is the founder and current chairman of the TCF Information Technology Professional Conference.

Room AR124

Safe Computing using Disposable Virtual Machines
Robert Gezelter, Software Consultant
Abstract: Web tracking is the latest high profile privacy threat. Simply put, many www sites leave cookies and similar data tags behind when one visits the site. When other sites are re-visited, the information from the different sites can be correlated, creating a privacy hazard. Also, various sites may require the installation of ActiveX controls, or may have been compromised, and may attempt to install malware. Disposable virtual machines are not difficult to create, and provide the ability to use a virgin system for each web session, limiting the damage. This session will demonstrate how to achieve this level of safety.
Bio: Robert Gezelter is a Senior Member of IEEE and an alumnus of the IEEE Computer Society's Distinguished Visitors Program. He holds BA and MS degrees in Computer Science from New York University, and is a Contributing Editor of the Computer Security Handbook, 5th Edition. He has spoken and written extensively on operating systems, networks, performance, security, tools, and similar areas. Robert Gezelter is in private practice and maintains his offices in Flushing, New York. He can be contacted via his firm's www site at http://www.rlgsc.com.

Room AR144
Robotics!
Orlando Hernandez, The College of New Jersey
Abstract: Robotics is the science and technology of robots, their design, manufacture, and application. It requires a working knowledge of electronics, software, and mechanics. Before the coining of the term robotics, there was interest in ideas similar to robotics (namely automata and androids) dating as far back as 400 BC. Robotics are used in industrial, military, exploration, home making, and academic and research applications. Although the appearance and capabilities of robots vary vastly, all robots share the features of electronic sensors, and a movable structure under some form of autonomous electronics, computer, and software control. This talk will introduce the audience to the element of robotic, example of uses, and future trends.
Bio: Orlando J. Hernandez received the Ph.D. degree in electrical engineering from Southern Methodist University. He is currently an Associate Professor and Chair of electrical and computer engineering at The College of New Jersey. He worked for Texas Instruments and with Maxim, where he held positions in design and design management. His research interests include color image segmentation and retrieval, computer vision, image processing, and high-performance specialized VLSI architectures to perform these tasks.

Room AR148
iLife '11 - Do more with photos, movies, and music on your Mac!
Dave Marra, Apple, Inc.
Abstract: Rediscover creative new ways to work with digital photos, movies, music and more with iLife! The iLife '11 suite features exciting new updates to iPhoto, iMovie and GarageBand, along with iDVD and iWeb, all with features specifically designed for education. In the classroom, over the internet or as part of a dynamic presentation or

podcast, iLife offers exciting new digital content creation tools that are powerful, fun and easy to use. Explore iLife '11 today!
Bio: As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility and Mac/PC integration. For more information about Dave, please visit his web site at www.marrathon.com.

Room AR128
Video Games - 2012
Roger W. Amidon, DX Computer Company
Abstract: The latest technology being used by Video Game Developers, including the XBox "Connect" technology will be presented.
Bio: Roger has been involved with video game technology since 1990. He is also one of the pioneers of the personal computer revolution, including the idea for the Trenton Computer Festival.

RoomAR114
The Incredible History of Computers in New Jersey
Evan Koblentz, Mid-Atlantic Retro Computing Hobbyists (MARCH)
Abstract: This lecture will explain the landscape of the vintage computing hobby, how to get involved and resources for finding information. "Vintage" for our hobby generally means anything from the mid-1940s to mid-1980s. People collect everything -- micros, portables, homebrews, minis, even mainframes! And don't forget the software, manuals, books, t-shirts and accessories. But unlike collecting art, furniture or stamps, vintage computers need to be restored and used, or else their circuits become bad -- or at least decrepit. Come to this lecture to learn all about the hobby and how you can get involved.
Bio: Evan Koblentz is a computer historian and an officer of the MARCH, which is a non-profit user group for collectors and restorers of vintage computers.

Room AR154
Do-It-Yourself (DIY) Radiation Sensor Project
Joe Jesson, Joseph E Jesson PC
Abstract: As a result of the Japanese Tsunami incident where radiation leaked from a reactor container, technology-savvy geeks quickly hacked radiation sensors and sent data online. It was amazing how many sensors were built and posted on innovative portals such as Pachube; so many that the Japanese government became not the sole source for radiation data. Joe will show how you can build a low-cost radiation sensor, and how to put this sensor online to be shared.
Bio: Joe Jesson has many years working in Electronics Engineering at Motorola, Oak, Switchcraft, etc. and Chief Technology Roles at General Electric and currently CTO at Xact Technology Inc. in NYC. Joe received the Edison award at GE in 2007 and holds graduate degrees from DePaul University in Chicago and an MTS from the University of Chicago, Jones & Searle Laboratory.

Room AR137
Introduction to the Digital Radio Modes
George Heron, New Jersey QRP Radio Club
Abstract: When you tune across the ham and shortwave bands these days, you often hear warbles, buzzes, whistling, beeps and other strange and musical sounds coming from the speaker. Many times these are different forms of "digital mode transmissions" being used by hams, military, taxi cabs and more. At this session, we will overview many of these digital modes, show what they sound like, and illustrate how you can listen in on the messages!
Bio: George Heron, N2APB, has been a ham for many years with interests in digital mode operation, software defined radio, and using his low power (QRP) radios out in the field. A leader of the New Jersey QRP Radio Club "NJQRP", George co-hosts a popular weekly online discussion session with hams all over the US. See http://www.njqrp.org for details on it all!

Room AR106
Arduino Workshop Continued – Arduino on the Network

2:35 pm – 3:30 pm Keynote Presentation, Physics Lecture Hall, Science Complex
From the Inner City to Pandora: The Power of Story in a Tech-Driven World
Jeff Gomez, CEO of Starlight Runner Entertainment
Abstract: Jeff will recount his personal journey from the inner city to the soundstages of the greatest movies and video games of the past decade. He will tell how his understanding of the fundamentals of storytelling and interactive technology in the 1980s influenced his ability to foresee and develop the techniques of multi-platform narrative being used today in projects as diverse as James Cameron's Avatar and Microsoft's Halo, as well as the nation-building we are witnessing in the wake of the so-called Arab Spring.
Bio: Jeff Gomez is the world's leading producer of transmedia entertainment properties. As CEO of Starlight Runner Entertainment, a New York-based digital production company, Jeff transforms intellectual properties into global franchises that reach young people as blockbuster films, television series, Triple-A videogames, comic books, novels, theater plays and popular music. A Latino raised in the projects of the Lower East Side of Manhattan, Jeff has always championed the rights of young people to realize their goals and live free of bullying and oppression. He has delivered his Never Surrender: The Kids Guide to Winning at Life seminars to over 200,000 young people, parents and teachers around the world. Jeff is a board member of the Producers Guild of America East, and sits on the advisory board of the PGA New Media Council.

3:40 pm to 4:35 pm

Room AR156
Developing Applications for Android Phones and Tablets
Barry Burd, Drew University

Abstract: See the Android app development process from beginning to end. Learn the basics steps for coding an app, preparing an app for publication on the Android market, and deploying the app on the market.
Bio: Barry Burd is a professor of Mathematics and Computer Science at Drew University in Madison, NJ. He is the author of several articles and books, including *Java For Dummies* and *Android Application Development All-in-One For Dummies*, both from Wiley Publishing. He received an M.S. degree in Computer Science at Rutgers University and a Ph.D. in Mathematics at the University of Illinois

Room AR124
Project Management
Donald Hsu, Dominican College
Abstract: Dice.com lists 5,000 project related openings daily! Project managers cut across major functional areas (accounting, human resource, marketing, and operation). They get jobs in construction, education, finance, healthcare, government, information technology, and manufacturing, just to name a few. Anyone can get into this profession. Salary level starts about $85,000 with or without PMI certification! Topics to be covered in this talk are: CPM, GANTT, PERT, SOW, WBS, budget variances, condition of satisfaction, effective business communication, planning strategy, project overview statement, project team members, scope creep, the use of the MS Project software, import/export files to Excel, and creating a master plan on the project server. Real-life projects will be demonstrated. Bring a friend to learn more!
Bio: Donald Hsu is a professor at Dominican College and President of the Chinese American Scholars Association (CASA). He has taught 70 subjects from Accounting to Unix. He worked/taught at 35 firms with 9,600+ clients. Clients are working 7000+ companies, including AT&T, Bank America, Goldman Sachs, IBM, JP Morgan Chase, Mercedes Benz, Microsoft, Morgan Stanley, Sony, Toyota, Verizon, etc. Since 2006, CASA has organized and ran 11 successful E-Leader conferences in Asia and Europe, http://www.g-casa.com. Don's complete profile can be found http://www.linkedin.com/pub/donald-hsu/0/15/AR1564.

Room AR144
TCF: Present and Future
Allen Katz, The College of New Jersey
Abstract: This talk will present TCF's 37 year history, report on its present status and prospects for the future. Pictures will be shown from the first and other notable TCFs. TCF's present and future will be discussed. Audience participation with be encouraged and suggestions on how TCF can be improved solicited.
Bio: Allen Katz is a professor of Electrical/Computer Engineering at The College of New Jersey. He is co-founder of the Trenton Computer Festival and has been the festival's director for more than 20 years. He has more than 25 years of experience in the microwave, satellite and computer industries. He holds 17 patents and has written more than 100 technical publications. He is founder and President of Linearizer Technology, Inc. He has been a licensed Radio Amateur since 1956. He received the ARRL Technical Merit Award in 1976, the John Chambers Award in 1982, an IEEE Centennial Medal in 1984, the Martin Marietta Astro Inventor of the year award in 1993, and in 2002

the William Randolph Lovelace II Award for outstanding contributions to space science and technology. He is a Fellow of the IEEE.

Room AR148
iWork – Impressive Documents, Presentations, and Spreadsheets
Dave Marra, Apple, Inc.
Abstract: Discover how easy and fun word processing, spreadsheets and presentations can be with iWork. The new iWork productivity suite features major updates to Pages, Numbers and Keynote, and all are compatible with Microsoft Office. Also discover iWork.com, a new public beta, web-based service from Apple that lets you share your iWork documents, spreadsheets, and presentations with Macs and PCs, in a way that's both simple and smart.
Bio: As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility and Mac/PC integration. For more information about Dave, please visit his web site at www.marrathon.com.

Room AR128
Title: Finding Homes for Technology Donations
Harry (Bud) Rizer, National Cristina Foundation
Abstract: For the past two years the National Cristina Foundation (NCF) has been developing a new system for processing technology donations to partner organizations throughout the country. The goal has been to transition choice and power to the hands of the donors and the recipients, while utilizing a virtual identification and tracking system that can be accessed by anyone from any location. Donors benefit through their ability to quickly locate local programs in need of the specific items they have to donate. Recipients benefit through their ability to make updates to their program profile at any time. This session will cover the features of this new system that could benefit anyone interested in technology reuse.
Bio: Bud has been involved in all aspects of computers and disabilities since 1980. He has directed clinical programs in Maryland, Mississippi, California and New Jersey. He has taught Assistive Technology and Educational Technology courses at numerous universities, most recently Rowan University in south Jersey. Throughout his career he has been a founding board member of the National Cristina Foundation and in 2008 assumed the full time position as Executive Director. In his current capacity Bud oversees all aspects of the Foundation, including its transition to a new virtual donation/matching system called the Cristina Network. NCF helps over 1,300 non-profits and schools throughout the country get matched with donations of technology equipment from local businesses, governments and individuals. This service is entering its 29th year of operation and is well known and established throughout the country.

Room AR114
Connected Medical Devices

Brenda Bell, The Web Warren

Abstract: Doctors and healthcare providers often ask us to keep track of certain personal health information, such as weight, blood pressure, blood glucose levels, or our responses to medication. Over time, the amounts of data we track can be overwhelming. Devices which connect directly to our computers, smartphones, or the Internet allow us and our healthcare providers to download and analyze these data to improve our health. Some of these medical devices can also be used to monitor the health of homebound patients and provide a more humanistic method of healthcare delivery. We will examine some of these medical devices, look at how they manage data, and how they fit into the evolving field of e-medicine.

Bio: After spending 17 years searching and indexing engineering information, Brenda turned her attention to the medical field following a 2002 diagnosis of Type 2 diabetes. She has since become an active member of the Diabetes Online Community, with interests in research and e-medicine. A number of her e-medicine-related presentations can be found at http://n2kye.webwarren.com/ACGNJ/. She blogs at dLife (http://www.dlife.com/diabetes-blog/blog/brenda-bell).

Room AR154

Power System Analysis and Computation

Anthony Deese, The College of New Jersey

Abstract: This talk will discuss the importance of computation and computational issues in the study and analysis of electric power systems. Issues to be discussed include parallel computation and analog methods.

Bio: Anthony Deese received his Bachelor of Science in Computer Engineering as well as Doctorate of Philosophy in Electrical Engineering from Drexel University in 2003 and 2008 respectively. And, while Anthony's graduate education focused on the study of electric power systems (as well as power electronics), his early research encompassed many related areas such as analog emulation of dynamic systems, field-programmable analog array technology, measurement-based load modeling, and state estimation in distribution systems. He has published in multiple journal as well as conference works in these areas. Following graduation, Anthony spent two years as a Post-Doctoral Researcher at his alma mater (Drexel) focused on expanding his publication record. During this time, he also maintained an active teaching schedule as adjunct at Temple and Widener Universities. In the fall of 2010, he joined The College of New Jersey as Assistant Professor in the Department of Electrical and Computer Engineering.

Room AR137

Title: RF Safety - How Safe are Radio Waves?

Robert Buus, Bell Labs (retired)

Abstract: This talk will discuss the effects of radio waves on the human body and review the applicable laws and standards that radio transmitters must meet. Whenever you apply for or renew an amateur radio license you must certify that the station will comply with the applicable FCC regulations. A simple visual basic program that can be used to evaluate an amateur radio station for FCC compliance will be demonstrated. If you bring a thumb drive, the program can be copied for your own use.

Bio: Bob Buus, W2OD has been a licensed radio amateur for 59 years (57 years as Extra class). Over the years, he has explored most aspects of amateur radio with special emphasis on building electronic equipment. While playing with high-power UHF transmitters for moonbounce, he became interested in the effects of RF on the human body and has carefully followed the evolution of FCC regulations over the years.

Room AR106
Arduino Workshop Continued – Creating Your Own Printed Circuit Board